

## REMARKS/ARGUMENTS

The non-final office action mailed on July 14, 2011, has been reviewed and carefully considered. Reconsideration is respectfully requested.

### Amendments to the Claims

Claims 1-12 were pending in the present application prior to this amendment. Claims 1-14 are now pending in the present application; among them, claims 1, 11, and 12 are independent claims. Claims 2, 3, 6-8, and 10-12 have been amended. Claims 13 and 14 have been added. No new matter has been added.

### Drawings

In the office action (page 2), the drawings are objected to for failure show reference character "70" in Fig. 5. Applicant has amended Fig. 5 to correct a typographical error and address the objection. Applicant respectfully requests withdrawal of the objection.

### Claim Objections

In the office action (page 3), claims 2, 3, and 6 are objected to for informalities. Applicant has amended the claims as suggested by the office in order to address these objections. Applicant respectfully requests withdrawal of the objections.

### Claim Rejections - 35 U.S.C. §112

In the office action (page 4), claims 1-12 stand rejected under 35 U.S.C. §112, ¶ 1 ¶2 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the applicant is unable to determine how the claim is indefinite based on the examiner's rejection. Despite the examiner's assertion that claims 1-12 are rejected under 35 U.S.C. §112, the examiner did not explain or cite why claim 1 is indefinite. Therefore, Applicant did not amend claim 1.

Regarding claims 2-12, the applicant has amended claims 3, 6, 7, 8, and 10-12 to address the above rejection. The applicant respectfully requests withdrawal of the rejection.

Claim Rejections - 35 U.S.C. §103

In the office action (page 6), claims 1, 2, 4, 8, 9, and 12 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,269,497 (Barth) in view of U.S. Patent No. 3,248,745 (Gunlock) and U.S. Patent No. 6,158,815 (Sugie). In the office action (page 8), claims 2-11 stand rejected under 35 U.S.C. §103(a) as being obvious over Barth in view of Gunlock and Sugie, and further in view of in view of U.S. Patent No. 2,818,105 (Herider).

Applicant thanks the examiner for her explanation of the rejection in her response to arguments. However, the applicant respectfully disagrees and maintains the previously submitted arguments. Furthermore, the applicant asserts that the examiner improperly failed to fully respond to all arguments presented in the response filed June 22, 2011 as further explained below. Applicant respectfully requests a full response to all provided arguments in any subsequent office action. Additionally, the applicant asserts further arguments in response to the examiner's reply.

Applicant also asserts that the rejection is improper as it appears the examiner simply copied and pasted the previous rejection of claims 1, 2, 4, 8, 9, and 12 in the December 22, 2010 office action based on the combination of Barth, Gunlock, and Sugie, despite the applicant substantively amending claim 1 in the response of June 22, 2011.

Regarding claims 1, 11, and 12, the examiner asserts that Gunlock teaches "wherein each spring has a V arch adjacent a first end of the spring and a W arch adjacent a second end of the spring." As previously presented through argument, the applicant respectfully disagrees. Gunlock describes V and W **shapes** which could be identified when viewed from the point of view of side elevation of Fig. 2, those shapes providing supports that depend downwardly at either end of a bent wire spring, and "open" in opposite directions. Gunlock does not teach a **leaf** spring at all, much less one **having** a V **arch** and a W **arch**. Gunlock's shapes react only in compression,

being located on a seat, where the bent wire shapes are urged "closed" from the weight of a sitting occupant. Applicant asserts that the V and W shaped bent wire are **support** portions, where the straight wire portions of the shapes – the legs that the examiner believes form the V or W – are in reality, sidewardly displaced substantially from one another (as shown in Figs. 3 and 4), and thus, would not be considered by one of ordinary skill to be equivalent or obvious variations of true V and W arches found as part of a leaf spring, which function by tending to open, when an occupant sits on the seat. Applicant asserts that Gunlock simply illustrates a spring supported by a V shaped brace and a W shaped brace, when viewed from a particular point of view. Those shapes displace the horizontal portion upward from the base and compress by torsion acting on the bent wire portions imparted by a seated occupant. Indeed, no one of ordinary skill, when viewing, for example, Gunlock's Fig. 6, would even be able to find the V and W shaped support portions, because they would not be understood to have those shapes.

In examiner's Response to Arguments of the office action (page 11), the examiner asserts that "Gunlock is used solely for the teaching a [sic] having the oppositely arranged supporting portions of a spring in a seat sprint assembly being in the form of a V-shaped supporting portion and a W-shaped supporting portion" and that "Barth, combined with the teachings of Gunlock, yield a seat spring assembly including oppositely arranged supporting portions or arches made up of a V-shaped supporting portion or arch and a W-shaped supporting portion or arch." Applicant asserts that the combination of Gunlock and Barth would not yield the subject matter recited in claims 1, 11, and 12, nor suggest the subject matter of claims 1, 11, and 12. Furthermore, Applicant asserts that one of ordinary skill in the art would not think to combine the Gunlock bent wire spring shapes and Barth in order to create a "leaf spring having one V arch adjacent the leaf spring end and one W arch adjacent the leaf spring second end" because Gunlock does not teach a leaf spring, but teaches V and W shaped (in only one point of view) supports for a spring, wherein the V and W shaped supports are not used in combination with a leaf spring, and are spatially located in entirety beneath the spring. On the other hand, the claims 1, 11, and 12 recite a leaf spring **having** a V arch and W arch.

Furthermore, in the office action's response to arguments, the examiner asserts "the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references" and continues "[r]ather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." The applicant does agree with this assertion regarding the test, and will use this test to show that the rejection is improper as described below. Applicant would like to note that MPEP § 2143.01(V) states "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is **no suggestion or motivation** to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)" (emphasis added). "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are **not sufficient** to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)" (emphasis added).

Applicant respectfully submits that the combination of the leaf spring having a V arch discussed in Barth with the V and W shaped supports of Gunlock is improper. Applicant respectfully submits that such a combination would result in a bizarre situation where the leaf spring having a V arch as taught by Barth would interfere with the V and W shaped supports as taught by Gunlock when pressure is applied to the leaf spring (for example, a user compresses the leaf spring when sitting on the seat). Therefore, the V arch as taught by Barth would need to be removed from the leaf spring. However, The V arch of the leaf spring is important to Barth and the removal thereof would frustrate the purpose of the system discussed therein, and essentially create the spring supported by the V and W shaped braces taught by Gunlock.

MPEP § 2143.01(V) states "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is **no suggestion or motivation** to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)" (emphasis added). "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are **not sufficient** to

render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)" (emphasis added). Wire springs, like Gunlock, and leaf springs like Barth, work differently. One would not combine isolated features of such springs.

Therefore, in the present case, a person having ordinary skill in the art would not think to modify Barth based on the teaching of Gunlock as Gunlock fails to teach a leaf spring **having** a V or W arch and such a combination of the V and W shaped supports in Gunlock with Barth would frustrate the purpose of Barth, that the spring is meant to support and bend in certain directions. Therefore, Applicant respectfully requests that the rejection be withdrawn.

Applicant also respectfully disagrees that it would be obvious to one of ordinary skill in the art to combine Sugie with Barth and Gunlock. Applicant reinforces and incorporates by reference the previously presented arguments of June 22, 2011 with regard to the combination of Sugie, Barth, and Gunlock. As previously presented, Sugie is directed to a completely different type of seat cushion and does not contain any leaf springs whatsoever, despite the examiner's incorrect assertion that they do. Sugie teaches a foam cushion that rests on a rigid wire structure connected to coil springs. The wire structure exists, not for the purpose of providing resilience or "springing", but rather to support the foam. It is a "deck". Applicant asserts that the teachings in Sugie would not suggest to one of ordinary skill in the art to combine a crosspiece and coil springs as presently recited in claims 1, 11, and 12 with the leaf springs, also claimed.

Additionally, Applicant asserts that the office action fails to show that the combination of Barth, Gunlock, and Sugie teaches each and every element or establishes that each and every element of recited claim 1 is obvious in view of the cited prior art. Specifically, the applicant asserts that the office fails to show or provide reason that Barth in view of Gunlock and Sugie teaches the "V arch being oriented on a first vertical axis so that it opens upwardly and said W arch being formed in two segments, each segment being oriented on a second and third vertical axis so that said W arch opens upwardly." As recited above, claim 1 was amended to include these limitations and the examiner failed to address this amendment. Therefore, the applicant asserts that the rejection is improper for failure to clearly articulate and provide reason for how all recited elements of claim 1 are obvious or unpatentable over the cited prior

art. Furthermore, Applicant asserts that neither Barth, Gunlock, nor Sugie, whether considered alone or in combination, teach this limitation as recited in previously presented claim 1. Therefore, Applicant respectfully requests withdrawal of the rejection.

Regarding the rejection of claims 2-11 based on the combination of Barth, Gunlock, Sugie, and Herider, the applicant respectfully disagrees. Regarding Barth, Gunlock, and Sugie, applicant reasserts the above arguments. With regard to Herider, the office simply asserts that Herider teaches "the use of a helper spring." However, Herider does not teach a helper spring as presently recited in the pending claims, specifically wherein the helper spring is fixed at one end of a leaf spring. Again, Herider does not teach a leaf spring of any kind. Applicant asserts that the supposed "helper" spring of Herider is not remotely used in a similar fashion as presented in the present application. Applicant further asserts that one of ordinary skill in the art would not think to combine Herider with Barth, Gunlock, and Sugie because the "helper" spring of Herider is fixed at a non-existent location in the spring assembly of the present application, namely below a crossing leaf spring. In the present application, the helper spring is fixed below a leaf spring at a leaf spring end. Therefore, one of ordinary skill in the art would not think to combine Herider, Barth, Gunlock, and Sugie to create the subject matter presently recited in the above claims. For at least these reasons, applicant respectfully requests withdrawal of the rejection.

Applicant also asserts that the examiner failed to properly reply to the affidavit filed on June 22, 2011. Examiner acknowledged that the affidavit had been "noted and considered," however, the examiner did not acknowledge or describe the facts proven by the affidavit in the Response to Arguments. Specifically, Applicant submitted that affidavit shows the subject matter of the present application has had commercial success (springs were so beneficial that they are found in ninety percent of Applicant's furniture products) and several additional uses that cannot be achieved by the prior art or is not possible by combining the prior art references. Applicant hereby reincorporates the arguments of June 22, 2011 by reference. Additionally, the applicant would like to reinforce that MPEP §2141 encourages consideration of secondary considerations, such as commercial success. Indeed, it is submitted that commercial

success is better evidence than different types of springs shown only in patents, which are only combined by inference. The examiner did not acknowledge or respond to Applicant's submission of commercial success showing that the combination of Barth, Gunlock, and Sugie is non-obvious. Applicant's respectfully assert that the response was improper for failing to properly respond to Applicant's arguments. Applicant's respectfully request a full response to the assertions in affidavit and arguments made based on the affidavit in any subsequent rejection. Furthermore, applicant's respectfully request withdrawal of the rejection based on the previously submitted arguments in addition to the above.

Claims 2-10 depend from claim 1. Based at least on these dependencies and the above arguments, Applicant respectfully requests withdrawal of the rejection.

#### New Claim

Applicant has added claims 13 and 14. Support for claim 13 be found in Fig. 5 and the supporting specification therein. Support for claim 14 can be found in Figs. 1-3 and 8-9. No new subject matter has been added.

#### Conclusion

For the reasons set forth above, the applicant respectfully submits that claims 1-14, now pending in this application, are in condition for allowance over the cited references. Accordingly, the applicant respectfully requests reconsideration and withdrawal of the outstanding rejections and earnestly solicits an indication of allowable subject matter.

Applicant would also like to note claim 1 has not been amended and that in the event the examiner does not issue a Notice of Allowance, making any subsequent office action rejection final would be improper, as the present rejection and response to arguments is improper as discussed above.

This amendment is considered to be responsive to all points raised in the office action. The examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve any remaining questions or concerns.

Respectfully submitted,

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**APPENDIX OF ATTACHMENTS**

Replacement Sheet of FIGS. 3-6  
(a total of 1 sheet of drawings)

and

Annotated Sheet Showing Changes of FIG. 5  
(a total of 1 sheet of drawings)